

Micromill Remote Ground Sensor (RGS) System



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VENDOR DESCRIPTION

The Micromill Remote Ground Sensor (RGS) system is designed for rapid covert deployments.

Equipment operation is very simple, to allow use with minimal training.

The passive sensors detect, classify and report intrusions. There are three primary sensor types (Passive Infrared, Seismic and Magnetic), as well as a general-purpose make/break contact input.

The radio signals are short duration and use proprietary Micromill coding to provide LPI/LPD characteristics. A relay unit can be used to extend the range between sensors and monitor.

The handheld monitor provides event data in an easily understood alphanumeric format, with a serial interface for connecting into sophisticated display systems, either directly or via the Micromill GSM communications interface unit.



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Business Category: Small Business

UGS

Power Source		Environmental	
Sensors	1 COTS 9V alkaline battery 15 days @ 100 activations/day @ -10°C 30 days @ 100 activations/day @ +20°C	High Temp	+55°C
Monitor	1 COTS 9V alkaline battery 6 hours @ 1000 activations/day @ 0°C 11 hours @ 1000 activations/day @ +20°C	Low Temp	-10°C (Monitor 0°C) (Operating)
		Humidity	>90% relative humidity
		Immersion	IP67
		Sand/Dust	IP67
Repeater	2 LSH20 lithium battery 25 days @ 1000 activations/day @ -10°C	EMI/EMC	Complies with EN300-220

Sensor	Description	Detection	Size/Weight	Features
Seismic	Employs sophisticated algorithm to classify targets as personnel or vehicles based on seismic signatures	Tracked Vehicle 0-50m Wheeled Vehicle 0-50m Personnel 0-20m	125mm x 75mm x 35mm Weight: 0.25 kg	<ul style="list-style-type: none"> ■ Passive detection ■ Covert operation ■ Low false alarm rate ■ Quiescent until activated by targets ■ Operates on COTS batteries
Passive Infrared	Detects temp. differential between target and background. Provides direction and target count.	Tracked Vehicle 2 -200m Wheeled Vehicle 2 -200m Personnel 2 -200m	50mm x 50mm x 175mm Weight: 0.25 kg	
Magnetic	Detects movement of ferrous metals. Provides direction and target count.	Tracked Vehicle 30m Wheeled Vehicle 20m Personnel 5m	125mm x 75mm x 35mm Weight: 0.25 kg	

Device	Description	Message Type	Size/Weight	Features
Monitor	Provides the capability to display sensor transmissions. Can be used to relay sensor data to an external digital display via built-in RS-232 port.	Proprietary to Micromill	180mm x 100mm x 40mm Weight: X.X kg	<ul style="list-style-type: none"> ■ VHF 140-175 MHz ■ Preset single channel ■ LPI/LPD ultra-short burst transmissions ■ 1-watt transmitters 10km range (50km airborne)
Repeater	Utilized to overcome line-of-sight obstructions or extend communications range by 10km		125mm x 65mm x 35mm Weight: 0.4 kg	